

## **ABSTRACT**

Device name conflicts are resolved when adding devices to existing ad hoc networks or when joining two ad hoc networks together. After a connection has been established between a new device to be added and a first member device in the ad hoc network, a name distribution message is transferred by the new device to the first member device. The name distribution message will be passed from member device to member device in the ad hoc network, and at each member device a name conflict check is performed. Device name conflicts are also resolved when joining two ad hoc networks together. The contents of name manager tables of the two respective ad hoc networks must be exchanged. This is accomplished by forming a name distribution message for each name record in the name manager tables of the two devices establishing the connection on behalf of their respective ad hoc networks. Then the name distribution messages formed in each respective ad hoc network are distributed to the other ad hoc network. In the process of distributing the name distribution messages through the other network, any name conflicts are commonly resolved in all of the devices in both ad hoc networks.